

# CULTURAL ASPECTS OF DECISION-MAKING IN ONLINE PURCHASES

## KULTURNI ASPEKTI DONOŠENJA ODLUKE O ONLINE KUPOVINI

TRŽIŠTE

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*kulturne dimenzije, donošenje odluke, online kupovina*

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### SAŽETAK

Empirijska istraživanja i praksa elektroničke trgovine pokazali su da se čak i u uvjetima globalizacije potrošači trebaju osjećati kulturno povezani s prodavateljem i/ili pružateljem usluge. Cilj je ovog rada identificirati i povezati glavne kulturne i psihološke aspekte koji utječu na donošenje odluke o e-kupovini. Prilagodba kulturi ima veliki potencijal u povećanju efikasnosti komunikacije s potrošačem, stoga lokalizacija e-ponuda ima pozitivan učinak na dijalog potrošača i prodavatelja. Rezultati provedene analize pokazuju glavne kulturne aspekte koje treba razmatrati pri prilagodbi e-ponuda na baltičkom (Latvija, Litva) i ruskom tržištu.

### ABSTRACT

Empirical studies and e-commerce practice have shown that even in the context of globalization customers still need to feel associated by culture with the seller or the service provider. The aim of this paper is to identify and bring together the main cultural and psychological aspects that influence decision-making in e-purchases. Cultural adaptation has a great potential for improving the efficiency of communication with customers; thus, localization of the e-offer has a positive impact on the customer-seller dialogue. The results of the conducted research show the main cultural aspects, which have to be considered when adapting e-offers to Baltic (Latvia, Lithuania) and Russian markets.

## 1. INTRODUCTION

On the one hand, integration and globalization processes allow companies to access the global market while information technologies (such as the Internet, for example) allow expanding products and services distribution channels. On the other hand, globalization does not mean the unification of products and services, as consumers all over the world differ significantly in their thinking models and decision-making habits due to cultural, geopolitical and other differences. Findings in the experiments on the economic decision-making process allow criticism of the predictions and decisions made based on the standard theory of economics. There is a necessity to outline how to make the non-economic factors work for the success of business-consumer communication.

Behavior economists neglect the assumption of rationality and claim that psychological factors (such as, for example, social preferences) have a huge impact. Decision-making processes have been studied by researchers in the field of economics, psychology and cultural anthropology but collaboration between the mentioned disciplines is surprisingly limited. Psychologists have acquired deep knowledge of the influence of personality differences on behavior. Anthropologists have identified the cultural dimensions which help to identify the cultural differences and their impact on perception. However, this information is barely applied to economic and management studies. Thus, in order to initiate a fruitful communication with potential customers and expand the markets, there is a need to meet customer expectations; likewise, it is necessary to know the differences of perception with regard to the economic issues by individuals in different countries and/or cultures.

The aim of this paper is to identify the main cultural aspects that influence private decision-making in online purchases.

The analysis of scientific literature as well as comparison and synthesis methods were used to

reach the paper's aim. The main method of information gathering was a customer survey, conducted in three countries: Latvia, Lithuania and Russia; the data was exposed to statistical and valuation analysis. The analysis yielded a set of cultural aspects, important for the decision-making of customers in their online purchases.

## 2. CULTURAL ASPECTS OF DECISION-MAKING

Culture may vary even within the same country but the differences between countries may be particularly pronounced. The ignorance of cultural specificities in a business environment can lead to conflicts in communication and, in turn, result in a decline in productivity (Pluke et al., 2005). Thus, the concept of culture in the development of international business is quite important: culture involves shared values, goals, methods and totality of relationships. Culture can also be influenced by ethnicity, language, history and level of the country's technical development. In the Lithuanian vocabulary, the concept of culture is described as a product of man's and society's activity, which allows the creation, use and transmission of material and moral values (Leonavičius, 1993). Beržinskas (2008) describes culture as a set of society's characteristics and the element of social entity which influences behavior of society's members. As culture is transmitted within each society through education, learning and adaptation to the environment, it is obvious that culture and behavior of society's members are not the same in different countries.

As it was mentioned by Vitkauskaitė (2009), the interaction on the Internet will not be optimal if the design of the system used is not in line with the user's perception about it. It was noted that people from various countries use the interfaces differently, that they like different graphic templates and their behavior in e-commerce differs as well.

It becomes clear that a company planning to expand globally must take into account the cultur-

al impact; it is essential to know what changes in marketing communication are needed for each culture: what the cultural peculiarities, priorities and orientations are. The knowledge about cultural peculiarities could be a considerable advantage in marketing campaigns intended to impact the decisions of customers. Likewise, this knowledge should be properly organized and adapted to the analytical work. Thus, the cultural aspects can be organized according to certain categories – dimensions (Marcus, 2004).

## 2.1. Hofstede's cultural dimensions

World cultures have various sets of social behavior and interaction; this fact has led anthropologists and researchers to develop the models of cultures that would allow describing the existing cultural differences. One of the most cited anthropologists is Geert Hofstede, who conducted a cultural study in 1970-80s at IBM. His study included 72 national subsidiaries, 38 occupations, 20 languages and 116,000 individuals. Based on this study, Hofstede identified several cultural dimensions (Hofstede, 1980; Smith et al., 2001):

1. Power distance: the extent to which people accept a high or low power distance in social hierarchy. The power distance index corresponds to the scale of formal power recognition. As power distance indicates the extent to which less powerful members of the public recognize the uneven distribution of power, Hofstede claims that countries with a high power distance have a centralized political structure and hierarchy, developed with considerable differences in status, while countries with a low power distance often focus on the ordinary people while the differences in status are not so strong.
2. Individualism vs. collectivism: orientation to the achievements of individual or team. In collectivism the interests of the team have more value than personal ones; it is the in-

dividual's loyalty to the group (Dinev, 2006). In societies with high individualism, the individuals are independent from each other and have their own personal goals. Individualistic cultures put much value upon time, freedom, challenge and personal material reward. Collectivistic cultures value learning, physical conditions, skills.

3. Masculinity vs. femininity: the extent to which a culture separates the traditional gender roles or does not do so. In masculinity cultures gender roles are more separated than in femininity cultures. Hofstede focuses on traditional gender roles: the masculinity side manifests itself through persistence, competitiveness, hardness and femininity through home-orientation, children, people and gentleness.
4. Uncertainty avoidance: the extent to which a culture accepts uncertainty. The uncertainty avoidance index assesses the importance of rules and standards, and shows how people feel in uncertain situations. Individuals in high uncertainty avoidance societies seek to reduce personal risk, they are more opposed to innovation and respect rules. Cultures choose different ways of uncertainty avoidance through various rituals; there are different approaches to the formalities, punctuality, law, religion, social requirements and ambiguity toleration.
5. Long-term orientation: orientation to the Confucian mindset, which emphasizes patience. In societies with long-term orientation the stability, prudence, long-term agreements have an exceptional value. Long-term orientation is important for Asian countries, which focus on virtuous behavior while Western countries focus on faith and the search for truth.
6. Indulgence vs. restraint: indulgence stands for a society that allows relatively free gratification of basic and natural human drives, related to enjoying life and having fun. Restraint stands for a society that suppresses gratification of needs and regulates it by means of strict social norms<sup>1</sup>.

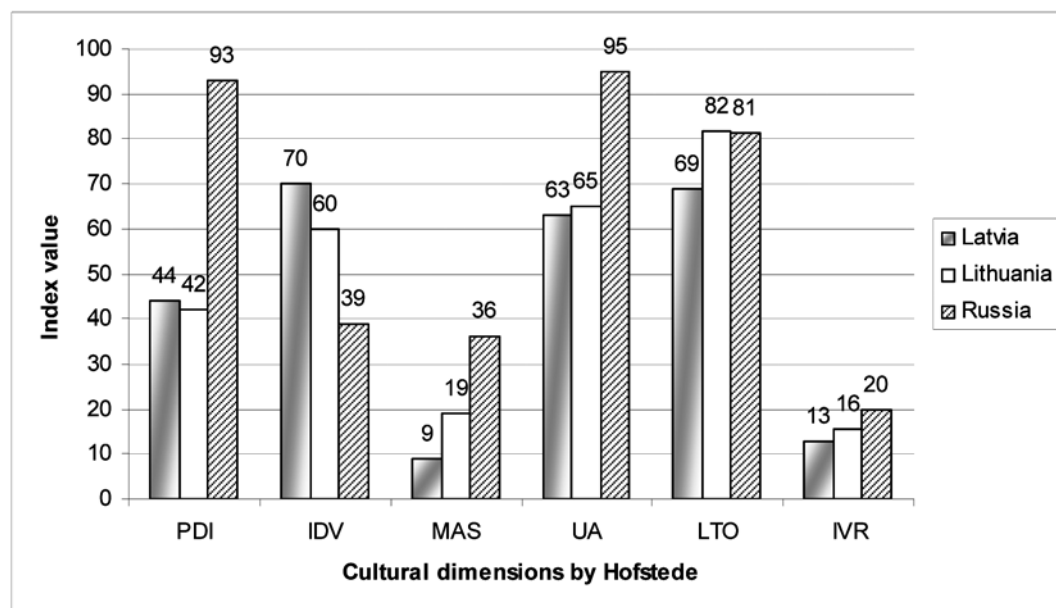
Hofstede explains that cultural orientations have been deeply imbedded in cultures throughout centuries, so modern technology can not eliminate them. These dimensions are widely used in business studies on the assessment of gender roles in various business fields, especially in shaping advertising strategies, in the research of purchase motives and product use etc. (Baack & Singh, 2007).

Since the objects of this research are Russia and two Baltic countries – Latvia and Lithuania, a comparison of Hofstede's culture indices for these countries is presented in Figure 1.

If we look firstly at the indices of Baltic countries, we can see that three of the six dimensions (power distance, uncertainty avoidance, indulgence vs. restrain) have quite similar index values. Both countries are mildly power distant, tend to avoid uncertainty and are quite restrictive on gratification. However, there are considerable differences in the indices of the remaining cultural dimensions: masculinity (difference between indices is about 53%), long-term orientation (16%) and individualism (14%). These indices show that both countries have a low masculinity level and tend to consider genders equally.

Considering the difference between index values, Latvians seem to be more tolerant of gender differences than Lithuanians. Both countries are long-term oriented but, still, Lithuanians are more mindful of long-term relations in business, and are prepared to dedicate more time to reaching their goals than Latvians. Both countries are highly individualistic but this feature is a bit more typical of Latvians than it is of Lithuanians. The indices for Russia differ significantly from the two Baltic states on four dimensions: power distance, individualism, masculinity and uncertainty avoidance. Russia is considered to be extremely uncertainty avoiding, power-oriented and tolerant of status differences. Moreover, Russia is more oriented to collectivism than Baltic countries seem to be while also tending to separate gender roles in social life, which is not the case either in Latvia or in Lithuania. Interestingly, the long-term orientation index is the same for Russia and Lithuania but less expressed for Latvia. Thus, according to Hofstede's indices analyzed at first glance, a general intuitive conclusion for these three countries could be drawn: the Russian culture seems to be the strictest, most structured and hard on allowing changes while the most relaxed, individualistic, dynamic and open to the changes of

**Figure 1:** Hofstede's culture indices for Latvia, Lithuania and Russia



the three culture is Latvian, with the Lithuanian culture somewhere in between. However, Hofstede's cultural dimensions are not the only way to analyze cultures.

## 2.2. Schwartz's cultural dimensions

In the Schwartz (1994) typology, seven dimensions are used to explain cultural differences: (1) conservatism – describes the importance of relations between groups in society, of social balance, security, identity and traditions; (2) intellectual autonomy – values individuality, autonomy, creativity; (3) emotional autonomy – emphasizes personal goals, self-gratification and pleasure; (4) egalitarian engagement – voluntary commitment to public welfare, equality, social justice, freedom; (5) harmony – highlights beauty, peace, harmony with nature, environmental protection; (6) mastery – values the efforts to adapt the environment, defend own rights, ambitions and independence; (7) hierarchy – assesses the perception of status and hierarchy, social power and authority.

Unlike Hofstede's, Schwartz's dimensions are intended to analyze culture in a non-business environment. Schwartz has used a different method, more examples and fresher data than Hofstede (Baack & Singh, 2007). His content analysis method of evaluating the cultural adaptation is used quite often in international marketing.

## 2.3. Baumgartner's and Marcus' cultural dimensions

Marcus (2004) worked on cultural differences on the web and used a list summarizing the main cultural dimensions, which have been highlighted by Baumgartner (2003). According to an expert survey, the key cultural dimensions in the web communication were selected from the list

mentioned above. The list is topped by the context dimension, defined as the quantity of information needed in a given situation (3.73 out of possible 4 points). The second dimension is technological development (3.24 points), which is very important for interface design. Uncertainty avoidance ranks third (3.21 points), and it is estimated that each interface should reduce the uncertainty, in particular at the moment of decision-making on the Internet purchase, so technological development is closely linked to the reduction of uncertainty. The dimensions of time perception and the authority concept were assessed to be less important (3.14 and 2.86 points, respectively). Cultural dimensions data was collected on the basis of the expert survey, grouped and ranged by statistical average, which shows the importance of each dimension on the web.

Cultural impact on web communication was analyzed by other authors as well; for instance, Singh et al. (2003) examined the impact of culture on design of websites in different countries. They used six dimensions described by 23 cultural categories (Singh et al., 2005), out of which four correspond to Hofstede's dimensions: power distance, collectivism, individualism, uncertainty avoidance. Two other dimensions used by Singh et al. (2003) are linked to the context – the cultural dimension, which was already described by Edward T. Hall. Hall (1976), divided cultures into ones of rich and poor context. In rich context cultures information is usually transmitted visually, by gestures and voice, while in poor context cultures communication is mostly laconic, informative and based on codes, facts and clear wording.

Thus, different authors mentioned above proposed a dimensional approach to the analysis of cultural differences. The main similar dimensions mentioned in different models are linked to the understanding of authority (power distance, hierarchy and authority concept), relations within society (individualism vs. collectivism, conservatism and autonomies), context (masculinity vs. femininity, harmony, mastery), uncertainty avoidance, time perception (long-term vs. short term orientation).

Only Hofstede's method has been applied to Latvia, Lithuania and Russia. However, these countries were also presented in Lewis' model of world cultures.

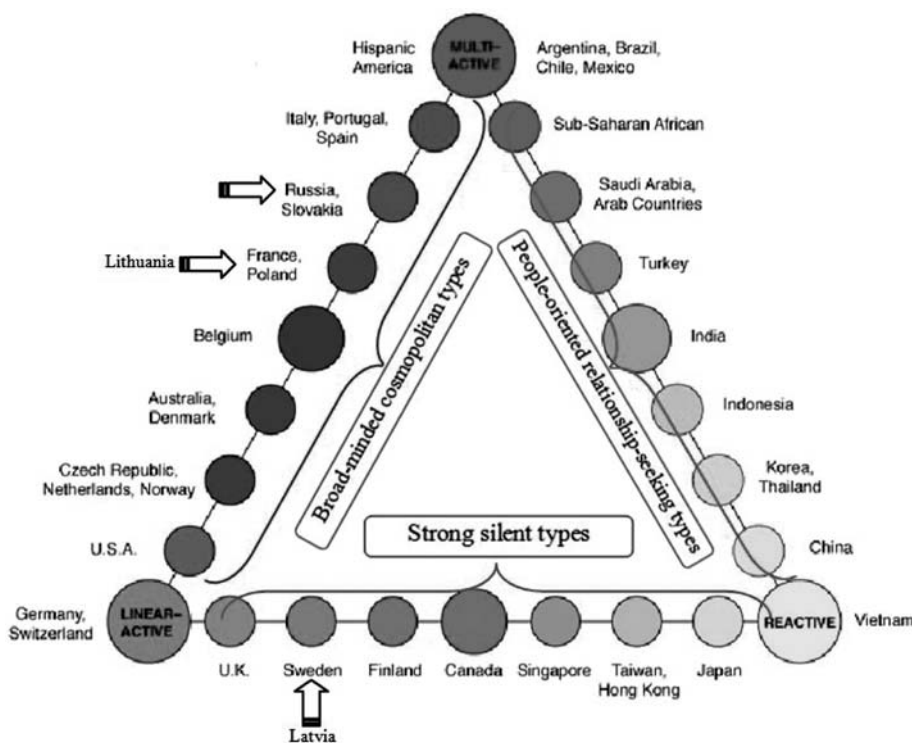
## 2.4. Lewis' model of world cultures

Lewis (2008) invoked a visual approach to the presentation of cultural differences among world countries. He described each culture by the action-ability and behavior of its representatives, dividing cultures into three orientations: multi-active, linear-active and reactive. According to Lewis (2008), the most important elements for typically multi-active cultures are: hierarchy, family, relationships, emotion, eloquence, persuasion and loyalty. The representatives of such cultures talk a lot and very emotionally, they are flexible, people-oriented and guided more by feelings

than by facts. For linear-active cultures the orientation to law, facts, deadlines, concrete results and planning is typical. Such people are polite but direct, they value truth more than diplomacy, stick to facts and like doing only one thing at a time, they are job-oriented and plan ahead step by step. Typical representatives of reactive cultures are guided by intuition; they value face-saving and are courteous, oriented to networking, common obligations and collective harmony. Lewis (2008) put the countries on the ribs of a triangle, showing cultural orientations and the examples of countries with typical or hybrid cultural orientation (Figure 2).

In Lewis' typology, the two Baltic countries – Latvia and Lithuania, are considered to be quite different in the cultural context. So, Latvia is assigned to the countries approximating a linear action orientation, which tends to be silent and calm and relies on facts, less on intuition but not on emotions. Lithuania, by contrast, is consid-

Figure 2: National cultural profiles according to Lewis (2008)<sup>2</sup>



ered to be representative of mixed multi-active and linear-active countries, tending to be broad-minded and quite active in communication, relying on feelings and on facts but not on intuition. Russia is placed on the same axis but closer to emotional multi-active countries than Lithuania – thus, according to Lewis, Russia and Lithuania are considered quite similar in terms of communication activity and different from Latvia.

However, Latvia and Lithuania as the only countries belonging to the Baltic languages group are quite often perceived to be very similar by their culture, way of thinking and perception of information. Therefore, there is a question – do the companies need to adapt their marketing proposals to Latvian and Lithuanian markets separately, or can the same marketing strategy perhaps be used in order to impact decision-making of individuals in these countries?

Of course, the markets of Baltic countries are quite small and the creation of different marketing strategies for each of them may not be cost-effective, so an alternative possibility might be considered – to use the strategy oriented to a big neighboring market – the Russian market.

The examples of Baltic countries are taken with an aim to find out: (1) whether the representatives of the countries, which are perceived stereotypically to be very similar, can differ with regard to online decision-making, (2) if so – whether there are differences between them and how these differences can be used to achieve marketing

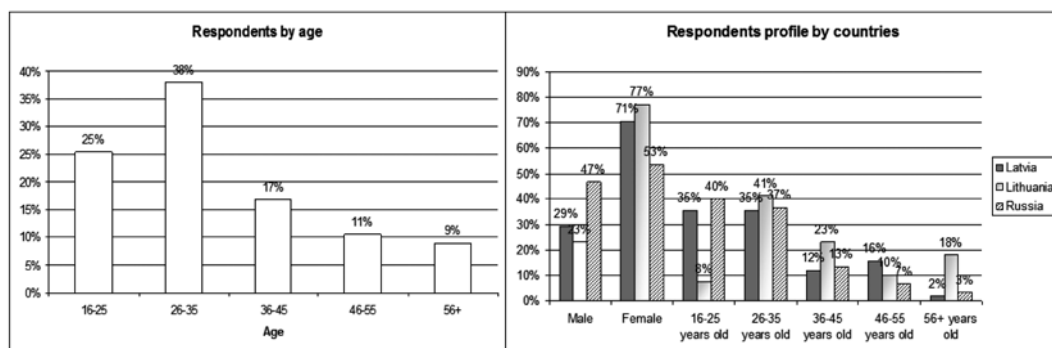
campaign success, (3) if not – the aspects to be considered in common marketing planning.

### 3. CULTURAL ASPECTS IN ONLINE PURCHASES – METHODOLOGY AND RESULTS OF SURVEY

The exploratory survey was based on the questionnaire, which proposes to the respondents from Latvia, Lithuania and Russia to agree or disagree with 23 given statements. These were formulated in a way that allows an evaluation of the extent of agreement with the proposed statements on a 7-point scale (see Table 1) and, in doing so, an identification of dominant cultural dimensions in the perception of respondents during online purchases. This research covered the answers of 189 respondents, 27% of them residing in Latvia, 41% in Lithuania and 32% in Russia. The response rate was 25%. The distribution of respondents by age and their demographic profile by countries are provided in Figure 3.

In this survey females were more active and young public prevailed as the survey was targeted at online purchasers. Thus, while the conducted survey cannot be considered to be representative of the entire society, its results can give an idea of the priorities, possible similarities and differences in the cultural aspect of online

Figure 3: Demographic profile of respondents





purchases. The statements presented to the respondents are provided in Table 1, with mean values of agreement assigned to respondent coun-

tries (where "1" means disagreement and "7" full agreement). The statistical analysis of the data set was conducted by means of the SPSS package.

**Table 1:** Grouped statistics of agreement with proposed statements

Statements proposed for agreement/disagreement [cultural dimension expressed by agreement with statement]	Country	N	Mean	Std. deviation	Std. error of mean
1. I am more interested in the online offers presented by high-level managers. [High power distance]	LT	78	3.08	1.829	.207
	LV	51	3.53	1.554	.218
	RU	60	3.57	1.890	.244
2. I have more trust in the online offers of big companies. [High power distance]	LT	78	5.38	1.435	.162
	LV	51	4.12	1.829	.256
	RU	60	4.70	1.825	.236
3. I have more trust in the companies established by the Government. [High power distance]	LT	78	4.15	1.699	.192
	LV	51	3.47	1.666	.233
	RU	60	4.70	1.825	.236
4. I have more trust in the companies established with local capital. [High power distance]	LT	78	3.82	1.421	.161
	LV	51	3.18	1.307	.183
	RU	60	3.47	2.159	.279
<b>Understanding of authority</b> (means of agreement with 1–4 statements) [High power distance]	LT	78	<b>4.10</b>	<b>.930</b>	<b>.105</b>
	LV	51	<b>3.57</b>	<b>1.304</b>	<b>.182</b>
	RU	60	<b>4.03</b>	<b>1.260</b>	<b>.163</b>
5. When I choose the product in the web shop, I keep in mind its effect on the environment (e.g. bio-products, recycled or recyclable products, energy saving products etc.). [Collectivism]	LT	78	4.64	1.432	.162
	LV	51	3.71	1.890	.265
	RU	60	4.03	1.794	.232
6. I prefer the online offers of the companies that dedicate part of their profit to charity funds. [Collectivism]	LT	78	4.05	1.562	.177
	LV	51	2.88	1.505	.211
	RU	60	3.60	2.010	.260
7. The web advertisement showing the success of a group of people is more attractive than that showing the success of individuals. [Collectivism]	LT	78	4.05	1.794	.203
	LV	51	3.94	1.974	.276
	RU	60	3.47	2.236	.289
8. I have more trust in the companies with a strong collective culture. [Collectivism]	LT	78	4.67	1.355	.153
	LV	51	3.88	1.829	.256
	RU	60	4.67	1.753	.226
<b>Relations in society</b> (means of agreement with 5–8 statements) [Collectivism]	LT	78	<b>4.35</b>	<b>1.073</b>	<b>.121</b>
	LV	51	<b>3.60</b>	<b>1.313</b>	<b>.183</b>
	RU	60	<b>3.94</b>	<b>1.409</b>	<b>.181</b>
9. The offers that accentuate their financial value are more attractive. [Poor context, Masculinity]	LT	78	5.10	1.718	.194
	LV	51	4.71	1.501	.210
	RU	60	5.10	1.591	.205
10. I prefer the online offers which provide facts and are not overloaded with impressive and colorful information. [Poor context, Masculinity]	LT	78	5.67	1.296	.147
	LV	51	5.06	1.529	.214
	RU	60	6.03	1.438	.186
11. I think that stereotypical advertisements (e.g. kitchen appliances advertised by women and cars advertised by men) on the Internet are not attractive anymore. [Rich context, Femininity]	LT	78	3.92	1.871	.212
	LV	51	4.35	1.659	.232
	RU	60	3.90	2.023	.261
12. The gender of online consultants doesn't affect my trust. [Rich context, Femininity]	LT	78	5.51	1.891	.214
	LV	51	4.82	1.905	.267
	RU	60	5.57	2.110	.272
<b>Context</b> (means of agreement with 9–12 statements) [Poor context, Masculinity]	LT	78	<b>4.33</b>	<b>.804</b>	<b>.091</b>
	LV	51	<b>4.14</b>	<b>1.126</b>	<b>.157</b>
	RU	60	<b>4.41</b>	<b>1.05</b>	<b>.136</b>



Table 1. Continued

13. I am not interested in cost-attractive online offers if they are not clearly described. [High uncertainty avoidance]	LT	78	5.13	1.582	.179
	LV	51	5.12	1.505	.211
	RU	60	5.70	1.629	.210
14. It is very important for me to know in advance the final price of the online offer. [High uncertainty avoidance]	LT	78	6.64	.980	.111
	LV	51	5.88	1.381	.193
	RU	60	6.67	.795	.103
15. I will not initiate the online purchase if I am not aware of all details of the procedure involved. [High uncertainty avoidance]	LT	78	6.00	1.140	.129
	LV	51	5.94	.947	.133
	RU	60	6.30	.908	.117
16. I appreciate the companies providing all the information about their online offer, i.e. not only positive but also negative aspects. [High uncertainty avoidance]	LT	78	6.31	1.120	.127
	LV	51	5.47	1.770	.248
	RU	60	6.30	1.197	.155
<b>Uncertainty avoidance</b> (means of agreement with 13–16 statements) [High uncertainty avoidance]	LT	78	6.02	.909	.103
	LV	51	5.60	1.046	.146
	RU	60	6.24	.798	.103
17. I prefer buying goods of the label I trust. [Long-term orientation]	LT	78	5.31	1.292	.146
	LV	51	5.00	1.428	.200
	RU	60	5.77	1.370	.177
18. I prefer finding out more about a company before making an online purchase. [Long-term orientation]	LT	78	5.49	1.642	.186
	LV	51	4.71	1.331	.186
	RU	60	5.57	1.466	.189
19. My decision to buy from a particular company online is usually based on good relations with it and previous experience. [Long-term orientation]	LT	78	5.67	1.234	.140
	LV	51	4.88	1.336	.187
	RU	60	5.90	1.231	.159
20. I prefer the offers that foresee a long-term contract and warranties. [Long-term orientation]	LT	78	4.85	1.521	.172
	LV	51	4.35	1.383	.194
	RU	60	5.53	1.761	.227
<b>Long-term orientation</b> (means of agreement with 17–20 statements)	LT	78	5.32	1.025	.116
	LV	51	4.73	1.076	.150
	RU	60	5.69	1.028	.132
21. <b>Feelings:</b> While making a decision, I trust my feelings and expectations.	LT	78	4.49	1.439	.163
	LV	51	5.24	1.069	.150
	RU	60	4.27	1.582	.204
22. <b>Facts:</b> While making a decision, I prefer to draw conclusions based on my knowledge.	LT	78	5.92	1.277	.145
	LV	51	5.53	1.102	.154
	RU	60	6.17	1.107	.143
23. <b>Intuition:</b> I listen carefully to my deepest feelings (intuition) before making a decision.	LT	78	3.85	1.773	.201
	LV	51	4.94	1.008	.141
	RU	60	4.03	1.957	.253

As the center value of a 7-point scale is 4, the agreement was expressed when mean values exceeded 4 points, and disagreement when mean values were below 4. When the mean values of dimensions varied around the center value (4) and the difference from it was not statistically significant, respondents were considered to be quite indifferent to the proposed statements of such dimensions.

After a one-sample t-test with the significance level of 0.05, such cases of the mean equality to

the center of the scale ("4") were identified: for Latvia – Context dimension, for Lithuania – Understanding of authority and Intuition in online purchases, for Russia – Understanding of authority and Relations in society dimensions as well as Feelings and Intuition in online purchases. Thus, it can be assumed that the mentioned cultural dimensions and psychological aspects of e-purchasers from the said countries are not pivotal. As concerns the remaining dimensions, the differences from the center are statistically significant; therefore, respondents are more determined

and, in particular, they show their predisposition to high uncertainty avoidance, long-term orientation and facts-based decisions.

According to the survey results, the following short characteristics of the countries' cultural profiles can be given with relevance for online purchases:

Latvian respondents may be characterized as low power distance-minded in online purchases; they do not consider the e-offers presented by top managers or guaranteed by the Government and local capital to be more attractive. Hence, e-offers can be successfully presented by small or medium-sized businesses in a manner that is near to people. The attitude to collective values in the online purchases of Latvian respondents is quite indifferent, and a tendency to individualistic values can be observed; so, during e-purchases, Latvians do not consider the possibility of being involved in charity and are indifferent to the collective culture or common society goals (such as environment protection) when making e-shopping decisions. It shows that the e-offer oriented to the Latvian market should highlight the importance of individuality of each customer and the value of such an offer for him/her personally. The information provided to the e-customer should be clear, exhaustive and the purchase procedure intuitive, as Latvian respondents showed quite high uncertainty avoidance and tendency to base their decisions on knowledge. However, the content of the e-offer should be emotionally close to a potential e-customer, because Latvian respondents indicated feelings and intuition as being important to them in decisions on e-purchases. The long-term partnership can be more attractive to Latvian customers than one-time or short business relations.

An analysis of the Pearson correlation showed a link between long-term orientation and power distance (0.671, Sig. 0.000) – respondents oriented to long-term business relations are high power-distance minded. Moreover, there is a direct correlation between long-term orientation and the importance of knowledge in deci-

sion-making (0.525, Sig. 0.000). Therefore, Latvian respondents oriented to long-term business relationships trust facts and seek solid and stable business partners. On the other hand, if a customer is apt to follow his/her intuition in decision-making, feelings will be important to him/her as well (0.458, Sig. 0.001).

Lithuanian respondents are indifferent to power distance in online purchases but put greater trust in big companies. They are mindful of environment protection when choosing products and trust the companies with pronounced collective values more than others. Lithuanians accept traditional gender roles; in online purchases, they are pragmatic and focus on the facts and knowledge more than they do on emotions. So, e-offers should include detailed factual information and show an estimated value of the e-offer not only for the individual but for society as a whole. Lithuanian respondents demonstrated high uncertainty avoidance and long-term orientation in online purchases. The analysis of correlation showed a link between uncertainty avoidance and the role knowledge (facts) in the decision-making process (0.533, Sig. 0.000). Thus, Lithuanians make their decisions on online purchases mostly according to the collected information on the respective e-offer and retailer; they can dedicate additional time to research relevant information, allowing for better decision-making. Russian respondents are inclined to traditional gender roles and information provision in a poor context mode. Knowledge and available factual data impact their e-purchase decisions more than do feelings or emotional effects. There is a considerable inverse correlation between the disposition to poor context and the roles of feelings (-0.449, Sig. 0.000) and intuition (-0.393, Sig. 0.002) in decision-making. On the other hand, a direct correlation between the inclination to poor context and knowledge importance in decision-making (0.462, Sig. 0.000) was demonstrated as well. Such data leads us to believe that the more respondents are disposed to be guided by feelings and intuition in decision-making the more they would appreciate a rich context mode of e-offers. The majority of Russian respondents in

this survey demonstrated their propensity to be guided by facts and knowledge (rather than feelings or intuition) on e-purchases; thus, poor context e-offers should be more prominent on the Russian e-market. Moreover, Russians are highly uncertainty avoidant and long-term oriented in online purchases. Their uncertainty avoidance directly correlates with the importance of knowledge and facts in decision-making (0.385, Sig. 0.002). Therefore, the e-offers intended for the Russian market should be very precise and detailed, providing more factual and trustworthy information (which may be checked) about the offered product (or service) and the e-retailer itself, as Russians are inclined to spend additional time on finding out more about a potential e-business partner before the e-purchase.

A summary of the means of examined cultural dimensions and psychological aspects of decision-making illustrated in Figure 4 demonstrates dominant dimensions as well as similarities and differences between e-purchasers by the country of residence.

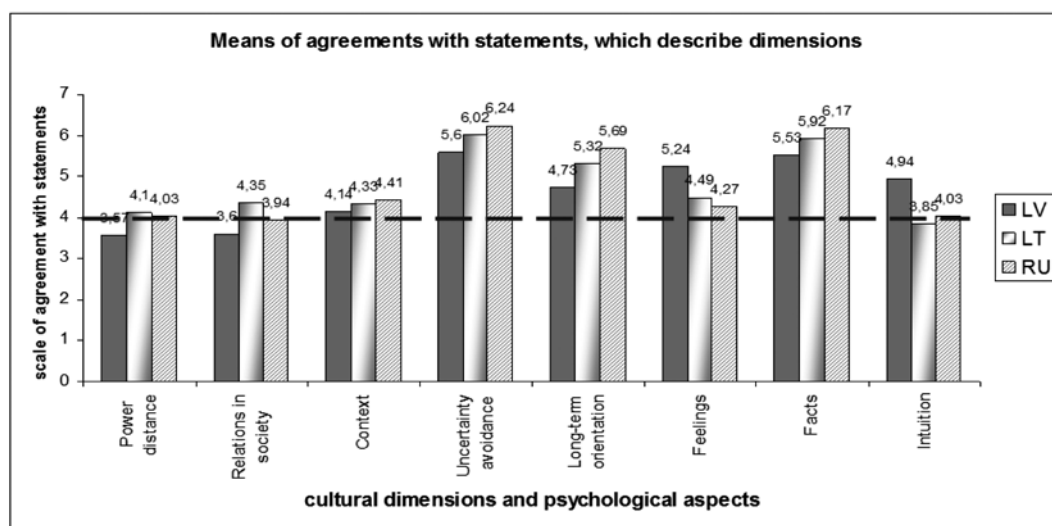
The observed link between the roles of facts and feelings in decision-making is logical: the more the respondents of any country rely on facts the less important for them are feelings during on-

line purchases. According to the survey results, the respondents from Latvia, Lithuania and Russia are quite close with regard to their attitude to cultural dimensions; for example, they are indifferent to power distance or are low power-distance minded but have aptitude for poor contexts and a traditional gender role perception.

As concerns other dimensions, Latvian e-purchasers seem to differ slightly from the residents of Lithuania or Russia – this is coherent with a separation of these countries in the Lewis (2008) model. Nevertheless, these differences are not drastic and the cultural attitudes of respondents from the surveyed countries do not clash, as expected after the analysis of Hofstede's indices.

In a bid to identify which of the observed differences among countries are statistically significant, the data was subjected to the Independent Samples t-test for the equality of means with Levene's test. It showed a statistically significant difference (at the 0.05 significance level) between Lithuanian and Latvian e-customers in the perception of Uncertainty avoidance (equal variances assumed:  $F 3.39$ , Sig. 0.068; mean difference 0.416), Long-term orientation (equal variances assumed:  $F 0.319$ , Sig. 0.573; mean difference 0.592), Understanding of authority (equal

**Figure 4:** Mean values of agreement with the statements describing dimensions by countries



variances not assumed; mean difference 0.535), Relations in society (equal variances not assumed; mean difference 0.749), the role of Feelings in decision-making (equal variances not assumed; mean difference -0.748) and the role of Intuition in decision-making (equal variances not assumed; mean difference -1.095).

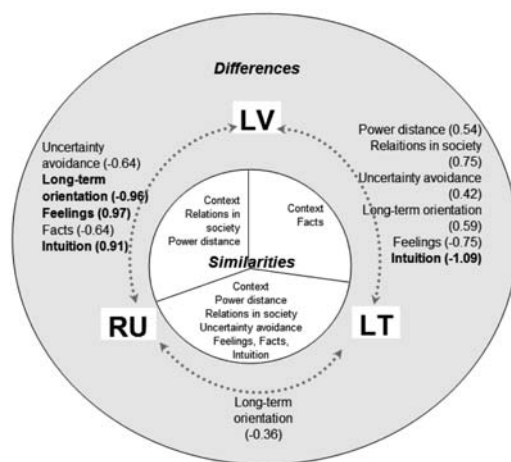
In case of the comparison between Latvian and Russian respondents, the statistically significant differences (at the 0.05 level) were found to exist among the following dimensions and psychological aspects: Long-term orientation (equal variances assumed:  $F$  0.211, Sig. 0.647; mean difference -0.956), the role of Feelings in decision-making (equal variances assumed:  $F$  3.643, Sig. 0.059; mean difference 0.969), the role of Facts in decision-making (equal variances assumed:  $F$  0.116, Sig. 0.734; mean difference -0.637), the role of Intuition in decision-making (equal variances not assumed; mean difference 0.908) and Uncertainty avoidance (equal variances not assumed; mean difference -0.639).

As concerns the comparison between Lithuania and Russia, the difference on only one dimension was found to be statistically significant (at the 0.05 level) – namely, Long-term orientation (equal variances assumed:  $F$  0.008, Sig. 0.930; mean difference -0.365).

Thus, the analysis that was conducted revealed an interesting situation: according to the number of dimensions, where statistically significant differences were found, the two Baltic countries, neighbors and the only members of the same language family are less similar between them in online purchases than either of them is to Russia. However, the values of means differences between Latvia and Lithuania are smaller than those between Latvia and Russia.

Figure 5 is provided for the purpose of complex analysis of the differences and similarities identified among the surveyed countries, with the values of statistically significant differences indicated in the brackets.

**Figure 5:** Differences and similarities of cultural and psychological attitudes in online purchases



Latvia has the largest number of deviations in relation to the other two countries considered while Russia displayed the largest number of similarities. The difference in time perception was identified among all three countries – Latvian e-customers are less inclined to keep long-term contacts and can be more oriented to quick-purchases than Lithuanian and Russian online customers while the residents of Russia tend to base their online purchase decisions on earlier purchase experiences, relations with individual retailers and loyalty considerations. Hence, the loyalty and trust development strategy could prove more effective in the Russian market than in the markets of Latvia or Lithuania; as the e-customers in Baltic countries showed more flexibility about long-term orientation in the survey, they might switch between e-retailers more easily than those in Russia and are not prepared to spend a long time searching for a particular long-term partner as Russians are.

Other discovered differences are pertinent to Latvia's case. While Latvian online customers do not like uncertainty in their e-purchases, they are more relaxed about it than their counterparts in Lithuania and Russia. Thus, the strategy of simplifying the e-purchase process and maximizing

the comprehensibility of the information provided on the e-offer, which is indispensable for the countries with high uncertainty avoidance, would be effective in case of all three respondent countries despite the differences identified among them.

The same situation can be observed with regard to role of factual information in decision-making – the provision of facts is seen as necessary in the e-offers in all three countries. However, Latvian e-customers are significantly more impacted by feelings and intuition when deciding on online purchases; the role of these aspects is as important to them as is the role of facts while Russians and Lithuanians put more trust in facts and are quite indifferent to the emotional part of the e-purchase. Therefore, the e-offers oriented to the Latvian market should appeal to customers' feelings and create an emotional basis for the purchase.

Thus, the choice of the Russian cultural model for online purchases would be rational, as (1) such a model would be suitable not only for Russian but for Lithuanian online customers as well, (2) it is acceptable to some extent to Latvian online customers too, (3) Russia's market is big and promising, so investing in the adaptation to Russia's online market should prove to be the most rewarding.

## 4. CONCLUSIONS

The extensive use of IT and the Internet in business has created the need to adapt marketing strategy and implementation to a new digital environment. However, the analysis provided in this paper showed that the adaptation to the rules of the digital world is not the only challenge when doing business online. Marketing campaigns on the Internet cannot ignore cultural differences among e-customers. The awareness of the differences in the perception of marketing actions by various cultures provides a competitive advantage to business as the e-commerce experience

has shown clients to be more positive about the marketing actions which are tailored to their cultural and personal peculiarities.

The analysis of the answers provided by Latvian, Lithuanian and Russian respondents showed the cultural dimensions which are important during online purchases in case of each country. The profiles of surveyed countries described by Hofstede's indices and by the Lewis cultural model differ from the attitude to the cultural dimensions expressed by e-purchasers from these countries. Thus, there is a need to correct the commonly accepted country cultural profiles to the online arena since e-purchasers can represent a part of the society that differs significantly in its decision-making from society in general.

The survey showed that the requirements presented by the three countries all point in the same direction: high uncertainty avoidance, need for detailed factual trustworthy information in e-offers and a clearly described value of e-offers as well as the orientation to long-term business relations. However, the analyzed countries differ by the degree to which these are expressed – the most demanding customers in online purchases are Russia's residents while the Latvian and Lithuanian e-purchasers are less strict in their demands. Thus, the e-offer adapted to the most exacting (Russian) audience should be able to satisfy Latvian and Lithuanian markets, which are more tolerant in terms of the cultural presentation of e-offers.

Nevertheless, the conducted analysis of research results highlighted the peculiarities to keep in mind when tailoring the e-offer to Baltic markets, in addition to the requirements raised by the Russian market: Latvian respondents need personal emotional appeal in e-offers since intuition and feelings are important to them in e-purchases; also, they focus on personally getting the value out of e-offers, unlike Lithuanian e-purchasers who, apart from detailed information on the e-offer itself, would appreciate a more detailed description of its value for society as well as its impact on the environment.

It can be concluded that a Russia-oriented e-offer model could be acceptable as the basis and then tailored to the peculiarities of Latvian and Lithuanian markets, thus allowing localization expenses to be kept at a cost-effective level.

However, the results of the survey presented here should be checked on larger audiences.

They might prove to deviate depending on the e-commerce sector, age and income of target groups. Nevertheless, the survey is believed to be useful in the initial stage of the e-offer adaptation to target markets as well as for further research of this issue.

## References

- 1 Baack, D., & Singh, N. (2007). Culture and web communications. *Journal of Business Research*, 60, 181-188.
- 2 Baumgartner, V. J. (2003). *A Practical Set of Cultural Dimensions for Global User-Interface Analysis and Design*. Diplomarbeit. Available at: [http://www.mavas.at/val/downloads/ValBaumgartner\\_PracticalSetOfCulturalDimensions.pdf](http://www.mavas.at/val/downloads/ValBaumgartner_PracticalSetOfCulturalDimensions.pdf)
- 3 Beržinskas, G. (2008). *Elevacinė etika*. Kaunas: Verba vera
- 4 Dinev, T., Bellotto, M., Hart, P., Russo, V., Serra, I., & Colautti, C. (2006). Privacy calculus model in e-commerce – a study of Italy and the United States. *European Journal of Information Systems*, 15, 389-402.
- 5 Hall, E. T. (1976). *Beyond Culture*. New York, NY: Doubleday
- 6 Hofstede, G. (1980). *Culture's consequences: international differences in work-related values*. Beverly Hills, CA: Sage
- 7 Leonavičius, J. (1993). *Sociologijos žodynas*. Vilnius: Academia
- 8 Lewis, R. D. (2008). *Cross-Cultural Communication: A Visual Approach*. London: Transcreen Publications
- 9 Marcus, A. (2004). *A Practical Set of Culture Dimensions for Global User-Interface Development*. available at: [http://www.lisa.org/fileadmin/filestore/wp/cdgwd\\_amanda.pdf](http://www.lisa.org/fileadmin/filestore/wp/cdgwd_amanda.pdf)
- 10 Pluke, M., Petersen, F., Pollard, D., & Szalai, B. (2005). *Cross cultural communication: How can you deliver what the user really wants?*. Available at: <http://www.lisa.org/Business-Decision-Da.512.0.html>
- 11 Schwartz, S. H. (1994). Are there universal aspects in the content and structure of values?. *Journal of Social Issues*, 50, 19-45.
- 12 Singh, N., Zhao, H., & Hu, X. (2003). Cultural Adaptation on the Web: A Study of American Companies' Domestic and Chinese Websites. *Journal of Global Information Management*, 11(3), 63-80.
- 13 Singh, N., Zhao, H., & Hu, X. (2005). Analyzing the Cultural Content of Websites: A Cross-National Comparison of China, India, Japan, and US. *International Marketing Review*, 22(2), 129-146.
- 14 Smith, M. J., & Salvendy, G. (2001). Cross-Cultural User-Interface Design. In: *Proceedings of Human-Computer Interface Internat. (HCII) Conference*, 2, 502-505. August 5-10, 2001, New Orleans.
- 15 Vitkauskaitė, E. (2009). Kultūrinių skirtumų įtaka tinklalapių turiniui. *Ekonomika ir vadyba*, 14, 541-552.

## Endnotes

- 1 The description of this dimension is taken from <http://geert-hofstede.com/dimensions.html>
- 2 The basis for this picture is borrowed from [www.crosscultur.com](http://www.crosscultur.com)